

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Michael J. Pugia et al.

Attorney 55197-00016USPT  
Docket:

Serial No.: Not Assigned

Group Art: Not Assigned

Filed: August 19, 2003

Examiner: Not Assigned

Title: MIXING IN MICROFLUIDIC  
DEVICES

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§1.97 and 1.98**

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING  
37 C.F.R. 1.8**

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below:

8/19/03  
Date

Deborah Richs  
Signature

Dear Commissioner:

In compliance with the duty of disclosure under 37 C.F.R. §1.56, it is respectfully requested that this Information Disclosure Statement be entered and the references listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R. § 1.98(d), copies of the listed references are enclosed.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information disclosed is, or is considered to be, prior art with respect to the present application or material to patentability as defined in 37 C.F.R. §§ 1.56.

The present Information Disclosure statement is being filed with the application and hence is believed to be timely in accordance with 37 C.F.R. § 1.97(b). Accordingly, no fees are believed to be due in connection with the filing of this Information Disclosure Statement. However, should any fees be deemed necessary (except payment of the issue fee), the Commissioner is authorized to charge any deficiency or to credit any over payment to Jenkins & Gilchrist Deposit Account No. 10-0447 (55197-00016USPT).

Respectfully submitted,

August 19, 2003  
Date

Harold N. Wells  
Harold N. Wells  
Reg. No. 26,044  
Jenkins & Gilchrist  
225 West Washington Street  
Suite 2600  
Chicago, Illinois 60606  
(312) 425-8610

Form PTO-1449 (modified)	Atty. Docket No. 55197-00016USPT	Serial No. Not Assigned
List of Patents and Publications for Applicant's <b>INFORMATION DISCLOSURE STATEMENT</b>	Applicant Michael J. Puglia et al..	
	Filing Date: August 19, 2003	Group: Not Assigned
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U.S. Patent Documents							
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	A01	3,798,459	03/19/74	Anderson et al.	250	218	
	A02	3,804,533	04/16/74	Scott	356	197	
	A03	4,515,889	05/07/85	Klose et al.	435	4	
	A04	4,534,659	08/13/85	Dourdeville et al.	366	338	
	A05	5,024,647	06/18/91	Jubin et al.	494	37	
	A06	5,222,808	06/29/93	Sugarman et al.	366	274	
	A07	5,286,454	02/15/94	Nilsson et al.	422	102	
	A08	5,826,981	10/27/98	Fowler et al.	366	337	
	A09	5,842,787	12/01/98	Kopf-Sill et al.	366	340	
	A10	5,921,678	07/13/99	Desai et al.	366	336	
	A11	6,063,589	05/16/00	Kellogg et al.	435	24	
	A12	6,065,864	05/23/00	Evans et al.	366	167.1	
	A13	6,082,891	07/04/00	Schubert et al.	366	338	
	A14	6,136,272	10/24/00	Weigl et al.	422	82.05	
	A15	6,143,248	11/07/00	Kellogg et al.	422	72	
	A16	6,170,981 B1	01/09/01	Regnier et al.	366	336	
	A17	6,186,660 B1	02/13/01	Kopf-Sill et al.	366	340	
	A18	6,190,034 B1	02/20/01	Nielsen et al.	366	336	
	A19	6,241,379 B1	06/05/01	Larsen	366	181.5	
	A20	6,264,900 B1	07/24/01	Schubert et al.	422	224	
	A21	6,399,361 B2	06/04/02	Brotherston et al.	435	283.1	
	A22	6,457,854 B1	10/01/02	Koop et al.	366	336	
	A23	US2001/0042 712 A1	11/22/01	Battrell et al.	210	511	
	A24	US2001/0048 637 A1	12/06/01	Weigl et al.	366	341	
	A25	US2001/0048 900 A1	12/03/01	Bardell et al.	422	100	
	A26	US20020015 959 A1	02/07/02	Bardell et al.	435	6	

<b>EXAMINER:</b>	<b>DATE CONSIDERED:</b>
EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

*INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)*

Form PTO-1449 (modified)	Atty. Docket No. 55197-00016USPT	Serial No. Not Assigned
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	Filing Date: August 19, 2003	Group: Not Assigned
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	A27	US20020048 535 A1	04/25/02	Weigl et al.	422	100	
	A28	US20020058 332 A1	05/16/02	Quake et al.	435	288.3	
	A29	US20020076 300 A1	06/20/02	Patterson, JR	411	92	
	A30	US2002/0076 350 A1	06/20/02	Weigl et al.	422	58	
	A31	US2002/0079 219 A1	06/27/02	Zhao et al.	204	451	
	A32	US2002/0097 532 A1	07/25/02	Voldman	360	323	
	A33	US2002/0097 632 A1	07/25/02	Kellogg et al.	366	220	
	A34	US2002/0097 633 A1	07/25/02	O'Connor et al.	366	336	
	A35	US2002/0114 738 A1	08/22/02	Wyzgol et al.	422	100	

### Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B01	WO 97/00121	✓ 01/03/97		B01D	69/02	
	B02	EP 0 871 539 B1	✓ 02/20/02	Europe	B01D	69/02	

### Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C01	Jesse Fowler et al. "Enhancement Of Mixing By Droplet-Based Microfluidics" Mechanical and Aerospace Engineering Dept., University of California. ✓
	C02	Whitesides et al. - Physics Today Online ✓
	C03	R. W. Barber et al. "Rapid Mixing Devices For Life Science App ✓
	C04	Laminar and turbulent flow ✓
	C05	David C. Duffy et al. - Anal. Chem. 1999, 71, 4669-4678 ✓

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